BENSON EDWARDS LLP

Barristers & Solicitors · Patent & Trade-mark Agents

CgC

10/697985

File No. ACE-19321

January 18, 2006

Certificate
JAN 27 2006
of Correction

VIA: COURIER

Attn: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

Re: United States Patent No. 6,978,721 B2

Issued:	**December 27, 2005**
Filed:	**October 31, 2003**
Title:	***Fold-Down Table***
Inventor:	**Timothy J. Myers**
Priority From:	**US Provisional Patent Application No. 60/422,895 filed November 1, 2002**

A typographical error has occurred during the printing of the Letters Patent for the above noted patent. We enclose a copy of page 3 from the original application, showing paragraph 1, line 2, as submitted. We also enclose a copy of the page from the letters patent, showing column 2, line 11 as printed. The word planar top "frame" has been printed as planar top "tame".

We enclose form PTO/SB/44 Certificate of Correction, duly completed. As this is a USPTO printing error we have not enclosed a fee payment.

We look forward to receiving the registered Certificate of Correction in due course.

BENSON EDWARDS LLP

Per:

ANTONY C. EDWARDS
(PRACTICING AS A PROFESSIONAL LAW CORPORATION)

ACE/np
encl.

table/us/cert of corr

200 - 270 HIGHWAY 33 W., KELOWNA, B.C. V1X 1X7
TEL: (250) 491-0206 FAX: (250) 491-0266
www.bensonedwards.com

In summary, the fold-down work surface according to the present invention includes a planar top frame having first and second opposite ends and mounted thereto at least one parallelogram frame. Each parallelogram frame is mounted to corresponding slides, the top frame forming an upper longitudinal element in each parallelogram frame. A rigid table top may be mounted onto the top frame. Each parallelogram frame lies in a corresponding vertical plane, and includes a lower longitudinal element, parallel to the frame, extending between the corresponding slide at a first end of the lower longitudinal element and at least one leg at an opposite second end of the lower longitudinal element. Each corresponding slide and each leg, at the corresponding second end of the lower longitudinal element, is pivotally mounted to or adjacent the first and second ends of the top frame and to the opposite first and second ends of the lower longitudinal element so that the top frame, the lower longitudinal element, the slide, and the leg for each parallelogram frame form a frame pivotable in the corresponding vertical plane. Each slide is slidably mounted in a vertical track which is mountable to a vertical rigid supporting surface, such a wall, having a constraining upper edge, such as the upper edge of the wall where the wall adjoins the ceiling.

At least one primary brace member is pivotally mountable, by mounting means at a lower end thereof, to the supporting surface. An opposite upper end of each primary brace member is pivotally mounted to the top frame adjacent the first end of the top frame so that the upper end of the each primary brace member is pivotally mounted to, so as to be disposed between, the top frame and the mounting means when mounted adjacent the vertical track on the supporting surface.

As the top frame is raised or lowered relative to the supporting surface, when the vertical track and primary brace member are mounted to the supporting surface, translation of the first end of the top frame is constrained by rotation of the top frame about the upper end of each primary brace member and by vertical sliding translation of each slide in its corresponding vertical track. Thus, as the second end of the top frame is raised in an arc so

FOLD-DOWN TABLE

CROSS REFERENCE TO RELATED APPLICATION

This application claims priority from U.S. Provisional Patent Application No. 60/422,895 filed Nov. 1, 2002 entitled Fold-Down Table.

FIELD OF THE INVENTION

This invention relates to the field of folding planar work surfaces generally and in particular to a table which folds up flush against a wall so as to substantially occupy the full wall height.

BACKGROUND OF THE INVENTION

Space in workshops or in homes is always at a premium. Consequently, it is well known in the prior art that solid surfaces such as tables or other work surfaces including beds, boards or other planar supports which fold down from a wall may be employed for a variety of purposes including everything from woodworking, to sewing, to crafts, to medical applications, etc. What is to the best of applicant's knowledge missing in the prior art and which is an object of the present invention to provide, is an improved folding work surface which folds neatly up against a wall and which deploys from the wall to provide a work surface having a length for example substantially equivalent to the full height of the wall between the floor and ceiling of the room, or otherwise generally equal to the height of the surface it is connected to. For example the work surface could be mounted within a box or cabinet, as in a fold-down first aid station, in which case it may be a bed and not a table. A horizontal surface extension is also provided which does not fold upwardly but, rather, remains operatively horizontal as the work surface is retracted and deployed that is, folded up and down, where, in the retracted position, the horizontal extension is tucked up out of the way adjacent the ceiling.

In the prior art of which applicant is aware, the following patents for folding tables mounted to walls, either taken individually or collectively, neither teach nor suggest the improvements according to the present invention: U.S. Pat. No. 1,601,112 which issued Sep. 28, 1926 to Cummings for a Wall Fixture; U.S. Pat. No. 1,688,533 which issued Oct. 23, 1928 to Eger for a Combination Work Bench and Tool Holder; U.S. Pat. No. 1,796,635 which issued Mar. 17, 1931 to Timmons for a Folding Wall Table; U.S. Pat. No. 2,616,774 which issued Nov. 4, 1952 to Prince for a Slide Away Table and Holding Frame Therefor; U.S. Pat. No. 2,716,044 which issued Aug. 23, 1955 to Overby for a Folding Wall Table; U.S. Pat. No. 4,100,858 which issued Jul. 18, 1978 to Bue et al. for a Folding Wall Table; U.S. Pat. No. 4,136,622 which issued Jan. 30, 1979 to Bue et al. for a Folding Wall Table; U.S. Pat. No. 4,155,609 which issued May 22, 1979 to Skafte et al. for a Wall-Hung Cabinet Arrangement; U.S. Pat. No. 4,263,854 which issued Apr. 28, 1981 to Moore et al. for a Cutting Table Storage Mechanism; U.S. Pat. No. 4,382,641 which issued May 10, 1983 to Abel for a Sewing Machine Storage Cabinet; U.S. Pat. No. 4,779,539 which issued Oct. 25, 1988 to Stiglich for a Wall-Mountable Folding Table; U.S. Pat. No. 5,513,574 which issued May 7, 1996 to Collins for a Wall Mounted Table Apparatus; U.S. Pat. No. 6,039,416 which issued Mar. 21, 2000 to Lambert for a Wall Mounted Pivoting Work Bench; International Application No. PCT/GB93/01340 filed Jun. 25, 1993 and published under Publication No. WO 94/13438 on Jun. 23, 1994 to Mallows for a Folding Workbench.

SUMMARY OF THE INVENTION

The fold-down work surface of the present invention is intended to include all manner of planar rigid horizontal supports including tables, beds, boards, etc.

In summary, the fold-down work surface according to the present invention includes a planar top tame having first and second opposite ends and mounted thereto at least one parallelogram frame. Each parallelogram frame is mounted to corresponding slides, the top frame forming an upper longitudinal element in each parallelogram frame. A rigid table top may be mounted onto the top frame. Each parallelogram frame lies in a corresponding vertical plane, and includes a lower longitudinal element, parallel to the frame, extending between the corresponding slide at a first end of the lower longitudinal element and at least one leg at an opposite second end of the lower longitudinal element. Each corresponding slide and each leg, at the corresponding second end of the lower longitudinal element, is pivotally mounted to or adjacent the first and second ends of the top frame and to the opposite first and second ends of the lower longitudinal element so that the top frame, the lower longitudinal element, the slide, and the leg for each parallelogram frame form a frame pivotable in the corresponding vertical plane. Each slide is slidably mounted in a vertical track which is mountable to a vertical rigid supporting surface, such as a wall, having a constraining upper edge, such as the upper edge of the wall where the wall adjoins the ceiling.

At least one primary brace member is pivotally mountable, by mounting means at a lower end thereof, to the supporting surface. An opposite upper end of each primary brace member is pivotally mounted to the top frame adjacent the first end of the top frame so that the upper end of the each primary brace member is pivotally mounted to, so as to be disposed between, the top frame and the mounting means when mounted adjacent the vertical track on the supporting surface.

As the top frame is raised or lowered relative to the supporting surface, when the vertical track and primary brace member are mounted to the supporting surface, translation of the first end of the top frame is constrained by rotation of the top frame about the upper end of each primary brace member and by vertical sliding translation of each slide in its corresponding vertical track. Thus, as the second end of the top frame is raised in an arc so that the second end is brought into adjacency with the constraining upper edge of the supporting surface, as the top frame is brought flush with the supporting surface the first end of the top frame is lowered into adjacency with the bottom of the supporting surface.

The primary brace member may include a pair of rigid linear braces, each associated with a corresponding slide in a corresponding track mountable to the support surface. The pair of braces may be spaced apart and parallel and the corresponding tracks may also be correspondingly spaced apart and parallel.

Advantageously, when the top frame is in a fully deployed position, the top frame is horizontal, for example perpendicular from the supporting surface, the leg is vertical, and a lower end of each leg is in contact with the floor surface. The legs may be a spaced apart pair of parallel generally linear legs mounted at and to the second end of the support

PTO/SB/44 (04-05)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,978,721 B2

APPLICATION NO.: 10/697,985

ISSUE DATE : December 27, 2005

INVENTOR(S) : Timothy J. Myers

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2, Line 11; "-tame-" should read "--frame--".

MAILING ADDRESS OF SENDER (Please do not use customer number below):

JAN 27 2006